

Amendments to the Claims:

Claims 1-7 (Canceled).

Claim 8 (Currently Amended): ~~The A method of claim 1, wherein said mutagenized nematode comprises a mutation in a component of a MAPK signal transduction pathway~~ for identifying a nematode having enhanced susceptibility to a pathogen, said method comprising the steps of:

(a) exposing a mutagenized nematode comprising a mutation in a component of a mitogen-activated protein kinase (MAPK) signal transduction pathway to a pathogen;
and

(b) determining survival of said mutagenized nematode when exposed to said pathogen, decreased survival of said mutagenized nematode relative to a non-mutagenized nematode identifying said mutagenized nematode as one having enhanced susceptibility to the pathogen.

Claim 9 (Original): The method of claim 8, wherein said component of the MAPK signal transduction pathway is *esp-2*.

Claim 10 (Original): The method of claim 8, wherein said component of the MAPK signal transduction pathway is *esp-8*.

Claim 11 (Original): The method of claim 8, wherein said component of the MAPK signal transduction pathway is *pmk-1*.

Claims 12-18 (Canceled).

Claim 19 (Currently Amended): ~~The A method of claim 12, wherein said mutagenized nematode pathogen response gene comprises a mutation in a component of a MAPK signal transduction pathway~~ for identifying a pathogen defense response gene, said method comprising the steps of:

(a) exposing a mutagenized nematode comprising a mutation in a component of a MAPK signal transduction pathway to a pathogen;

(b) determining survival of said mutagenized nematode when exposed to said pathogen, decreased survival of said mutagenized nematode relative to a non-mutagenized nematode indicating a mutation in a nematode pathogen defense response gene; and

(c) using said mutation as a marker for identifying said pathogen defense response gene.

Claim 20 (Original): The method of claim 19, wherein said component of the

MAPK signal transduction pathway is *esp-2*.

Claim 21 (Original): The method of claim 19, wherein said component of the MAPK signal transduction pathway is *esp-8*.

Claim 22 (Original): The method of claim 19, wherein said component of the MAPK signal transduction pathway is *pmk-1*.

Claims 23-86 (Canceled).

Claim 87 (New): The method of claim 8, wherein said mutagenized nematode is *C. elegans*.

Claim 88 (New): The method of claim 87, wherein said *C. elegans* is an N2 L4 worm.

Claim 89 (New): The method of claim 8, wherein said pathogen is a bacterium.

Claim 90 (New): The method of claim 89, wherein said bacterium is *Pseudomonas aeruginosa* (strain PA14).

Claim 91 (New): The method of claim 8, wherein said bacterium is *Enterococcus faecalis*.

Claim 92 (New): The method of claim 8, wherein said mutagenized nematode is exposed to said pathogen under slow killing conditions.

Claim 93 (New): The method of claim 19, wherein said mutagenized nematode is *C. elegans*.

Claim 94 (New): The method of claim 93, wherein said *C. elegans* is an N2 L4 worm.

Claim 95 (New): The method of claim 19, wherein said pathogen is a bacterium.

Claim 96 (New): The method of claim 95, wherein said bacterium is *Pseudomonas aeruginosa* (strain PA14).

Claim 97 (New): The method of claim 19, wherein said bacterium is *Enterococcus faecalis*.

Claim 98 (New): The method of claim 19, wherein said mutagenized nematode is exposed to said pathogen under slow killing conditions.